WATER POLLUTION CONTROL

INDEX

Part 1 — pp. 1 – 148
Part 2 — pp. 149 – 284
Part 3 — pp. 285 – 440
Part 4 — pp. 441 – 592

	Page
ABBREVIATIONS	587
ACTIVATED-SLUDGE PROCESS:	
A Pilot-Plant Evaluation of a Deep Shaft Linked to Conventional Aeration Without Inter-Stage Settlement to Give a Fully-Nitrified Effluent	58
Causes and Control of Activated-Sludge Bulking	455
Design and Operation of Bardenpho Plants in an African Country	443
Oxygen Requirements, Energy Consumption and Sludge Production in Extended-Aeration Plants	100
Recent Developments in Oxidation Ditches	579
The Comparative Examination of 14 Activated-Sludge Plants Using Enzymatic Techniques	300
ANALYSIS AND MONITORING:	
A Review of the Criteria Used for Assessing the Strength of Sewage and Computations Based Thereon	136
Computer Archiving of Marine Micro-biological, Chemical and Biological Data	426
Determination of COD by a Mercury-Free Open-Tube Method	416
Potential Applications for Sealed Radioactive Sources in the Water Industry	314
Software Enhancements to an ICL Filter Computer	569
The Comparative Examination of 14 Activated-Sludge Plants Using Enzymatic Techniques	300
The Decreasing Rate of Biochemical Oxidation of Sewage	435
The Determination of Selenium in Sewage Sludge Using an Acid-Digestion Bomb and Fluorimetry	562
The Monitoring of River Water Quality Within the Great Ouse Basin Using the Chironomid Exuvial Analysis Technique	116
The Role of the *Daphnia* Bioassay in the Assessment of the Quality of Effluent Discharges	539
ANNUAL CONFERENCE	151
ANNUAL CORPORATE MEETING (FIFTY-FIRST)	281
ANNUAL DINNER	278
AUTOMATION:	
Process Management Systems at Sewage-Treatment Works: Witney Evaluation and Demonstration Facilities	172
Telemetry — The Norwich Approach	547
COUNCIL, CONSTITUTION OF, 1984–85	586
CROLL MEMORIAL LECTURE (THIRTEENTH)	155
EAST ANGLIAN BRANCH:	
Annual Report, 1983–84	580
EAST MIDLANDS BRANCH:	
Annual Report, 1983–84	580
EUROPEAN WATER POLLUTION CONTROL ASSOCIATION	442
HONG KONG BRANCH:	
Annual Report, 1983–84	580
INDUSTRIAL EFFLUENTS:	
Anaerobic Digestion of Agricultural Wastes	507
Anaerobic Treatment of Waste Waters in the Beet Sugar Industry	499
Experience with the Anodek Process	514
Minimizing the Interference of Oxygen in Chromium Waste Treatment	420
Problems Associated with the Disposal of Trade Effluent to Sewers — Charging and Control	367
The Application of Anaerobic Packed-Bed Reactors to Industrial Waste-Water Treatment	491
The Potential of Anaerobic Digestion for Treating Liquid Wastes	484
The Treatment of Wastewater from the Leather Industry	450
METRIC SYSTEM:	
Conversion Factors	588
Parameters and Conversion Factors	589
METROPOLITAN AND SOUTHERN BRANCH:	
Annual Report, 1983–84	580
MISCELLANEOUS:	
Conditions of Contract — A New Approach	203
Digestion Gas Package Power Generation — Some Recent Experiences Within Severn-Trent Water Authority	91
Effective Operations: The Manager's Role	265
Performance Measurement in the Water Industry	376
Project Design Management	191
Report of the Overseas Membership Review Sub-Committee	142
NORTH EASTERN BRANCH:	
Annual Report, 1983–84	581
NORTH WESTERN BRANCH:	
Annual Report, 1983–84	581
NORTHERN BRANCH:	
Annual Report, 1983–84	582

WATER POLLUTION CONTROL

INDEX

Part 1 — pp. 1 – 148
Part 2 — pp. 149 – 284
Part 3 — pp. 285 – 440
Part 4 — pp. 441 – 592

	Page
ABBREVIATIONS	587
ACTIVATED-SLUDGE PROCESS:	
A Pilot-Plant Evaluation of a Deep Shaft Linked to Conventional Aeration Without Inter-Stage Settlement to Give a Fully-Nitrified Effluent	58
Causes and Control of Activated-Sludge Bulking	455
Design and Operation of Bardenpho Plants in an African Country	443
Oxygen Requirements, Energy Consumption and Sludge Production in Extended-Aeration Plants	100
Recent Developments in Oxidation Ditches	579
The Comparative Examination of 14 Activated-Sludge Plants Using Enzymatic Techniques	300
ANALYSIS AND MONITORING:	
A Review of the Criteria Used for Assessing the Strength of Sewage and Computations Based Thereon	136
Computer Archiving of Marine Micro-biological, Chemical and Biological Data	426
Determination of COD by a Mercury-Free Open-Tube Method	416
Potential Applications for Sealed Radioactive Sources in the Water Industry	314
Software Enhancements to an ICL Filter Computer	569
The Comparative Examination of 14 Activated-Sludge Plants Using Enzymatic Techniques	300
The Decreasing Rate of Biochemical Oxidation of Sewage	435
The Determination of Selenium in Sewage Sludge Using an Acid-Digestion Bomb and Fluorimetry	562
The Monitoring of River Water Quality Within the Great Ouse Basin Using the Chironomid Exuvial Analysis Technique	116
The Role of the *Daphnia* Bioassay in the Assessment of the Quality of Effluent Discharges	539
ANNUAL CONFERENCE	151
ANNUAL CORPORATE MEETING (FIFTY-FIRST)	281
ANNUAL DINNER	278
AUTOMATION:	
Process Management Systems at Sewage-Treatment Works: Witney Evaluation and Demonstration Facilities	172
Telemetry — The Norwich Approach	547
COUNCIL, CONSTITUTION OF, 1984–85	586
CROLL MEMORIAL LECTURE (THIRTEENTH)	155
EAST ANGLIAN BRANCH:	
Annual Report, 1983–84	580
EAST MIDLANDS BRANCH:	
Annual Report, 1983–84	580
EUROPEAN WATER POLLUTION CONTROL ASSOCIATION	442
HONG KONG BRANCH:	
Annual Report, 1983–84	580
INDUSTRIAL EFFLUENTS:	
Anaerobic Digestion of Agricultural Wastes	507
Anaerobic Treatment of Waste Waters in the Beet Sugar Industry	499
Experience with the Anodek Process	514
Minimizing the Interference of Oxygen in Chromium Waste Treatment	420
Problems Associated with the Disposal of Trade Effluent to Sewers — Charging and Control	367
The Application of Anaerobic Packed-Bed Reactors to Industrial Waste-Water Treatment	491
The Potential of Anaerobic Digestion for Treating Liquid Wastes	484
The Treatment of Wastewater from the Leather Industry	450
METRIC SYSTEM:	
Conversion Factors	588
Parameters and Conversion Factors	589
METROPOLITAN AND SOUTHERN BRANCH:	
Annual Report, 1983–84	580
MISCELLANEOUS:	
Conditions of Contract — A New Approach	203
Digestion Gas Package Power Generation — Some Recent Experiences Within Severn-Trent Water Authority	91
Effective Operations: The Manager's Role	265
Performance Measurement in the Water Industry	376
Project Design Management	191
Report of the Overseas Membership Review Sub-Committee	142
NORTH EASTERN BRANCH:	
Annual Report, 1983–84	581
NORTH WESTERN BRANCH:	
Annual Report, 1983–84	581
NORTHERN BRANCH:	
Annual Report, 1983–84	582

Page

NORTHERN IRELAND BRANCH:
Annual Report, 1983–84 582

OBITUARY:
S. C. Pillai 585

OVERSEAS PRACTICE:
An Investigation into the Hydraulic Resources of a Lagoon in Portugal 327
Design and Operation of Bardenpho Plants in an African Country 443
Operating Experience of Major Water and Wastewater Treatment Plants 579
Research Related to Water Pollution Control in South Africa 184
The Design and Operation of the Purification Lakes in the Ruhr Valley 243
The Groundwater Pollution Hazard in the Cape Flats 473
The Treatment of Sewage for Use in Municipal Irrigation in Abu Dhabi, UAE 387
The Treatment of Wastewater from the Leather Industry 450

PRESIDENTIAL ADDRESS 5

ROYAL COMMISSION ON ENVIRONMENTAL POLLUTION:
Memorandum of Evidence to 576

SCOTTISH BRANCH:
Annual Report, 1983–84 582

SEWAGE TREATMENT:
Basic Design Criteria and Operating Experience of a Large Nitrifying Filter . . 340
The Application of Oxygenation Techniques to the Wastewater Treatment Industry . . 579
The Treatment of Sewage for Use in Municipal Irrigation in Abu Dhabi, UAE 387

SEWAGE WORKS DESIGN AND OPERATION:
Basic Design Criteria and Operating Experience of a Large Nitrifying Filter . . 340
Operational Frequencies for Sewage-Treatment Works Maintenance . . 52
The Treatment of Sewage for Use in Municipal Irrigation in Abu Dhabi, UAE 387

SEWAGE-WORKS EFFLUENTS:
Effects of the Recharge of Sewage Effluents upon the Quality of Chalk Groundwater 349

SLUDGE TREATMENT AND DISPOSAL:
Digestion Gas Package Power Generation — Some Recent Experiences Within Severn-Trent Water Authority 91
Sewage Sludge Treatment and Disposal — The Way Ahead 163
Sludge Dewatering at Bolton Sewage-Treatment Works 71
Stabilization of Sewage-Sludge Cake by Addition of Lime and Other Materials . . 9
The Use of Consolidated Sewage Sludge as a Soil Substitute in Colliery Spoil Reclamation 289

Page

SOLID WASTES:
Leachate Treatment with Particular Reference to Aerated Lagoons 521

SOUTH EASTERN BRANCH:
Annual Report, 1983–84 582

SOUTH WESTERN BRANCH:
Annual Report, 1983–84 583

SOUTHERN AFRICAN BRANCH:
Annual Report, 1983 583
Biennial Conference, 1983 439

TECHNICAL VISITS 275

TIDAL WATERS:
An Investigation into the Hydraulic Resources of a Lagoon in Portugal 327
Estimation of the Loads of Some List I and II Substances to United Kingdom Tidal Waters — A Comparison with Previous Estimates 554
Pollution Control in the Humber Estuary . . 82
The Development and Use of a Theoretical Mathematical Model for the Medway Estuary 31

UNPUBLISHED PAPERS 579

WATER QUALITY MANAGEMENT:
A Large-Scale Field Experiment in the Control of Eutrophication in the Norfolk Broads 400
An Investigation into the Hydraulic Resources of a Lagoon in Portugal 327
Effects of Motorway Run-Off on the Ecology of Stream Algae 409
Health and Amenity Aspects of Surface Waters 215
Effects of the Recharge of Sewage Effluents upon the Quality of Chalk Groundwater 349
Lea Marston Purification Lake: Operational and River Quality Aspects 226
Maintenance of Drinking Water Quality . . 23
Pollution Control in the Humber Estuary . . 82
Research Related to Water Pollution Control in South Africa 184
The Design and Operation of the Purification Lakes in the Ruhr Valley 243
The Effect of the Establishment of Cumbernauld New Town on the Red Burn and Bonny Water 579
The Evaluation of Eutrophication Impact on Public Water Supply Reservoirs in East Anglia 42
The Groundwater Pollution Hazard in the Cape Flats 473
Water Reclamation and River Management in the Tame Basin 254

WELSH BRANCH:
Annual Report, 1983–84 583

WEST MIDLANDS BRANCH:
Annual Report, 1983–84 584

AUTHORS

	Page
Anderson, G. K.	491
Andrews, D.	265
Bailey, M. C.	327
Barnard, J. L.	443
Baxter, K. M.	349
Beard, M. J.	349
Bell, B.	91
Best, D. G.	416
Bevins, R. E.	9
Botha, G. R.	184
Box, M. H.	254
Broughton, N. W.	499
Buckley, F. T.	539
Bumstead, N.	499
Burgess, S.	514
Calcutt, T.	163
Cartwright, D.	340
Casseres, K. E. de	416
Chismon, G. L.	521
Clapham, G. S.	203
Clark, D.	579
Cooper, D. R.	450
Curran, J. C.	426
Davies, M.	300
Donaldson, M.	91
Donnelly, T.	491
Dussart, G. B. J.	409
Eadie, A. G.	426
Fleet, I. A.	562
Forster, C. G.	484
Gascoine, I. S.	31
Genders, D.	547
Goodson, M. G.	579
Green, M. B.	226
Greene, L. A.	42
Hamilton, L. M.	172
Harkness, N.	367
Harrington, D. W.	521
Hastwell, C.	300
Hayes, C. R.	42
Hobson, P. N.	507
Imhoff, K. R.	243
Jeffries, C.	579
Jenkins, D.	455
Johnstone, D. W. M.	100
Jones, F.	215
Jury, K. M.	31
Kidson, R. J.	23
Lee, P. J.	314
Levy, J. Q.	327
Longmaid, F. M.	9
McKeown, K. J.	491
Mance, G.	554
Maris, P. J.	521
Matthews, G.	547
May, B. D.	416
Metcalf, B.	289
Montgomery, H. A. C.	349
Morgan, D.	23
Morris, G. G.	514
Morris, G. M.	539
Moss, J.	163
Nolan, P.	547
Noone, G. P.	91
Oakley, H. R.	5
O'Donnell, A. R.	554
Okun, D. A.	155
Parish, R. C.	226
Phillips, G. L.	400
Qasim, S. R.	420
Quantick, M. J. LeP	376
Richards, S. R.	300
Robinson, J.	387
Robinson, J. E.	52
Robinson, M. S.	58
Ruse, L. P.	116
Shackleton, J.	426
Shore, M.	499
Shuttleworth, S. G.	450
Slabbert, N. P.	450
Smith, L. J.	387
Sourbutts, K.	71
Staples, K. D.	191
Stones, T.	136, 435
Taylor, C. R.	420
Taylor, G. S.	562
Taylor, K.	71
Tomlinson, E. J.	172
Tredoux, G.	473
Upton, J.	340
Wall, C. S.	52
Webster, J.	569
White, K. E.	314
White, W. R.	215
Wilkinson, A.	579
Williamson, K.	172
Wilson, R. S.	116
Woods, D. R.	226
Woodward, G. W.	82
Woolaston, R.	52